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## NOTICE OF ALLOWANCE AND FEE(S) DUE

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036 EXAMINER
WIECZOREK, MICHAEL P

ART UNIT PAPER NUMBER

1712

DATE MAILED: 04/01/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,511	07/10/2006	Morimasa Wada	062577	4164

TITLE OF INVENTION: METHOD FOR MANUFACTURING POLARIZING FILM, POLARIZING FILM OBTAINED BY THE METHOD, AND IMAGE DISPLAY APPARATUS USING THE POLARIZING FILM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/01/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

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II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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appropriate. All further of andicated unless correcte maintenance fee notificat	correspondence includir d below or directed oth	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of a) specifying a new corr	maintenance fees verspondence address;	vill be r and/or	mailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.			
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	,						(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	PR	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/585,511	07/10/2006		Morimasa Wada			062577	4164
TITLE OF INVENTION MAGE DISPLAY APPA		NUFACTURING POLA POLARIZING FILM	ARIZING FILM, POLA	RIZING FILM OB	TAINE	D BY THE METHC	DD, AND
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUI	E PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0 \$1810		\$1810	07/01/2011
EXAMI	INER	ART UNIT	CLASS-SUBCLASS	7			
WIECZOREK, MICHAEL P 1712		1712	427-171000	_			
Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIC	ess an assignee is ident n in 37 CFR 3.11. Comp GNEE	oletion of this form is NO	data will appear on the T a substitute for filing a (B) RESIDENCE: (CIT	patent. If an assign n assignment. "Y and STATE OR C	COUNT	RY)	ocument has been filed for
Please check the appropri	ate assignee category or	categories (will not be pr	rinted on the patent):	┛ Individual   Co	orporati	on or other private gro	oup entity 🖵 Government
a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
a. Applicant claims	cus (from status indicated s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no lo				
NOTE: The Issue Fee and nature of the rest as shown by the re	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regi	stered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				_			
This collection of information application. Confident submitting the completed his form and/or suggestic Nov. 1450. Alexandria, Victorial Conference of the	ation is required by 37 C iality is governed by 35 L application form to the ons for reducing this but is single 22313-1450 DO	FR 1.311. The information U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OF (1997).	on is required to obtain on 1.14. This collection is expression of the industrial of the Chief Information Officompleters of the completers of the completer	r retain a benefit by t estimated to take 12 p lividual case. Any co cer, U.S. Patent and FO THIS ADDRESS	he publi minutes omments Tradem	ic which is to file (and to complete, includin s on the amount of tin ark Office, U.S. Depa O.TO: Commissioner to	by the USPTO to process) g gathering, preparing, and ne you require to complete urtment of Commerce, P.O. For Patents P.O. Box 1450.

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10/585,511	07/10/2006	Morimasa Wada	062577	4164	
38834 75	90 04/01/2011	EXAMINER			
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			WIECZOREK, MICHAEL P		
			ART UNIT PAPER NUMBER		
			1712		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 719 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 719 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.		Applicant(s)		
	10/585,511		WADA ET AL.		
Notice of Allowability	Examiner		Art Unit		
	Michael Wi	eczorek	1712		
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAII or other app <b>GHTS.</b> This	NS) CLOSED in this a propriate communicati application is subjec	application. If not includion will be mailed in due	ded e course. <b>THIS</b>	
2. ☑ The allowed claim(s) is/are <u>1-4,9,12 and 13</u> .					
3. Acknowledgment is made of a claim for foreign priority un  a) ■ All b) ■ Some* c) ■ None of the:  1. ■ Certified copies of the priority documents have  2. ■ Certified copies of the priority documents have  3. ■ Copies of the certified copies of the priority documents have  International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" on the delow. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. ■ A SUBSTITUTE OATH OR DECLARATION must be submit	been receive been receive cuments have of this comments	red. red in Application No. re been received in the nunication to file a rep application.	is national stage applic	equirements	
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) hereto or 2 ho Paper No./Mail Date  (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s)    Notice of References Cited (PTO-892)   5. Notice of Informal Patent Application					

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#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lee Wright on March 23, 2011.

The application has been amended as follows:

CLAIM 1 LINE 9: Changed the term "the polymer film" to "the film".

CLAIMS 5 through 8 were cancelled.

2. The following is an examiner's statement of reasons for allowance:

Sugino (U.S. Patent Publication No. 2002/0015807) teaches a method of forming a polarizing film used for LCDs comprising dyeing a polyvinyl alcohol (PVA) film followed by stretching then drying the film. Sugino further teaches that the formation steps may be conducted simultaneously and that there is no limitation on the order of the steps (Page 1 Paragraph 0005) and that the stretching of the PVA film is conducted in water (Page 2 Paragraph 0023), thus teachings wet stretching. Sugino does not however fairly teach or suggest that the drying is done while conveying the film with rolls or that drying is conducted under a condition of there being an R/W ratio of between 1.0 and 4.0 wherein R is the distance between adjacent rolls and W is the initial width of the film.

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Nishida (U.S. Patent Publication No. 2003/0062645) teaches a method of manufacturing PVA polarizing films (Page 1 Paragraph 0002) wherein during the drying step the dyed film is heated and conveying with three rollers where the L/W or R/W ratio is from 0.2 to 0.6 and where L is the distance between a pair of adjacent rolls and W is the initial width or width of an unoriented/stretched film. Nishida further teaches that by having the rollers configured to have and R/W ration of 0.2 to 0.6, necking of the polymer film during stretching is suppressed. (Page 1 Paragraphs 0006, 0009-0010, Pages 2-3 Paragraph 0026 and Figure 2). However, Nishida specifically teaches away from conveying the film when the L/W or R/W ratio is greater than 0.6 because this results in greater necking and as a result the width of the film obtained is narrower (Page 1 Paragraph 001). Thus Nishida does not fairly teach or suggest drying and conveying the stretched film through rolls under the condition that R/W is between 1.0 and 4.0.

Kondo (U.S. Patent Publication No. 2002/0182427) teaches a method of manufacturing a polarizing film (Page 0002) wherein the film is dyed (Page 3 Paragraph 0027) and then stretched and dried using heated rollers (Page 2 Paragraph 0019-0024). Kondo further teaches that the distance between rolls, and thus a ratio of distance between rolls and the initial width of the polymer film, is a cause effective variable because it affects the rate of strain applied to the film (Page 3 Paragraph 0026). However, Kondo does not fairly teach or suggest the specific roll distance (R) conditions that would result in an R/W ratio of between 1.0 and 4.0 during drying. Furthermore, the specification of the present invention (Pages 32 Paragraph 0091 through Pages 38 Paragraph 0105) provides evidence of unexpected results in that the claimed R/W range produces polarizing films having improved optical characteristics over those produced when the

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R/W value was outside the required range of 1.0 to 4.0. Thus the R/W ratio range of between 1.0 and 4.0 is critical to the claimed invention.

Thus, none of the references of Sugino, Nishia or Kondo, alone or in combination, fairly teach or suggested that during the drying of the dyed and wet stretched film that the film in dried under the condition of the R/W ratio being between 1.0 and 4.0.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Claims 1 through 4, 9, 12 and 13 were allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Wieczorek whose telephone number is (571)270-5341. The examiner can normally be reached on Monday through Friday; 6:00 AM to 3:30 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frederick J. Parker/ Primary Examiner, Art Unit 1715

/Michael Wieczorek/ Examiner, Art Unit 1712